REMARKS/ARGUMENTS

Claims 9-14 are pending in this application.

Claims 9-14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hickernell (U.S. 6,201,457) in view of Kono (U.S. 5,929,722). Applicants respectfully traverse the rejection of claims 9-14 under 35 U.S.C. § 103(a) over Hickernell in view of Kono.

Claim 9 recites:

> "A delay line comprising:
> a multilayer structure formed by laminating a plurality of dielectric layers;
> a transmission line formed on a dielectric layer embedded in the multilayer structure;
> a plurality of ground conductors disposed on the dielectric layers and a pair of said ground conductors being disposed on opposite sides of the transmission line; and
> **a capacitance disposed on the multilayer structure and connected in parallel to the transmission line for setting a desired delay time of the delay line, wherein said capacitance is adjustable.**"

The Examiner acknowledged that Hickernell fails to teach or suggest the features of "the capacitor being adjustable or a variable capacitor or a varicap diode, a multilayered structured [including] a plurality of dielectric layers, a plurality of ground conductors disposed on the dielectric layers and a pair of ground conductors disposed opposite the transmission line and the capacitance being provided by electrodes formed on the dielectric layers." The Examiner relied upon Kono to allegedly cure the deficiencies of Hickernell. Thus, the Examiner concluded that it would have been obvious "to substitute the general ceramic structure of Hickernell with the detailed multilayer structure of Kono since examiner take notice of the equivalence of the general ceramic structure and the multilayered structure for use in the transmission line art and the selection of any of these known equivalent[s] would be within the level of ordinary skill in the art." Applicants respectfully disagree.

In addition, the Examiner alleged that it would have been obvious "to make the

capacitor adjustable in order to adjust the frequency of the notch filter. The adjustable capacitor can be realized through the use of a variable capacitor or varicap diode." Applicants respectfully disagree.

First, the Examiner has completely failed to provide any motivation for combining the teachings of Kono with Hickernell. Hickernell is directed to a **notch filter** including a SAW device and a delay line. In contrast, Kono is directed to a **low-pass filter** and does **not** include **any** SAW device or **any** delay line. Kono fails to teach or suggest that the structure disclosed therein could or should be used for a notch filter, and certainly fails to teach or suggest that the structure disclosed therein could or should be used in a notch filter including a SAW device and a delay line. Thus, contrary to the Examiner's allegation, the multilayered structure of the low-pass filter of Kono is clearly **NOT** a well-known equivalent structure for the notch filter of Hickernell.

Furthermore, the Examiner has failed to explain how the structure of the **low-pass filter** as taught by Kono, which does not include any SAW device or any delay line, could be used in the **notch filter** as taught by Hickernell, which includes a SAW device and a delay line.

The Examiner is reminded that obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. In re Geiger, 815 F.2d 686, 2 USPQ 1276, 1278 (Fed. Cir. 1987). Since neither Hickernell nor Kono fail to provide any teaching, suggestion or incentive supporting the combination alleged by the Examiner, Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness.

Second, the operation of a notch filter (as disclosed in Hickernell) is completely different from the operation of a low-pass filter (as disclosed in Kono), and thus, to utilize the structure of Kono in the notch filter of Hickernell would clearly change the principle of operation of the device of Hickernell. It is well settled law that if the proposed modification or combination of the prior art would change the principle of

operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959) and MPEP § 2143.01.

Third, the Examiner has filed to provide **any** reference which teaches or suggests an adjustable capacitance, and certainly has failed to provide any reference which teaches or suggest the feature of "a capacitance disposed on the multilayer structure and connected in parallel to the transmission line for setting a desired delay time of the delay line, wherein said capacitance is adjustable." The PTO has the burden under 35 U.S.C. §103 to establish a prima facie case of obviousness. See In re Piasecki, 745 F .2d 1468, 1471-72, 223 USPQ 785, 787-88 (Fed. Cir. 1984). The PTO can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. See In re Fine, 837 F .2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1984). This it has not done. The Examiner failed to cite prior art that remedies the deficiencies of Hickernell and Kono or that suggests the obviousness of modifying Hickernell and Kono to achieve Applicants' claimed invention.

Instead, the Examiner improperly relied upon hindsight reconstruction of the claimed invention in reaching his obviousness determination. To imbue one of ordinary skill in the art with knowledge of the invention, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher. W.L. Gore & Assoc. v. Garlock, Inc., 721 F .2d 1540, 1543, 220 USPQ 303, 312-13 (Fed. Cir. 1983).

The Examiner is reminded that prior art rejections must be based on evidence. Graham v. John Deere Co., 383 U.S. 117 (1966). The Examiner is hereby requested to cite a reference in support of his position that it was well known at the time of Applicants' invention to include a capacitance disposed on the multilayer structure and

connected in parallel to the transmission line for setting a desired delay time of the delay line, wherein said capacitance is adjustable. If the rejection is based on facts within the personal knowledge of the Examiner, the data should be supported as specifically as possible and the rejection must be supported by an affidavit from the Examiner, which would be subject to contradiction or explanation by affidavit of Applicants or other persons. See 37 C.F.R. § 1.104(d)(2).

Therefore, Applicants respectfully submit that Hickernell and Kono, applied alone or in combination, fail to teach or suggest the unique combination and arrangement of elements recited in Applicants' claim 9.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claim 9 under 35 U.S.C. § 103(a) as being unpatentable over Hickernell in view of Kono.

In view of the foregoing amendments and remarks, Applicants respectfully submit that Claim 9 is allowable. Claims 10-14 depend upon claim 9, and are therefore allowable for at least the reasons that claim 9 is allowable.

MPEP § 707.02, "Applications Up for Third Action and 5-Year Applications," states:

> The supervisory patent examiners should impress their assistants with the fact that the shortest path to the final disposition of an application is by finding the best references on the first search and carefully applying them.
>
> The supervisory patent examiners are expected to personally check on the pendency of every application which is up for the third or subsequent official action with a view to finally concluding its prosecution.
>
> Any application that has been pending five years should be carefully studied by the supervisory patent examiner and every effort made to terminate its prosecution. In order to accomplish this result, the application is to be considered "special" by the examiner.

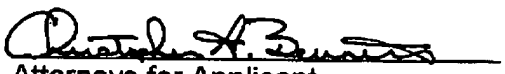
Applicants hereby respectfully request that the Examiner consult with her Supervisory Patent Examiner to expedite the conclusion of the prosecution of the present applicant.

In view of the foregoing amendments remarks, Applicants respectfully submit that this application is in condition for allowance. Favorable consideration and prompt allowance are solicited.

The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1353.

Respectfully submitted,

Date: September 14, 2004



Attorneys for Applicant

Joseph R. Keating
Registration No. 37,368

Christopher A. Bennett
Registration No. 46,710

KEATING & BENNETT LLP
10400 Eaton Place, Suite 312
Fairfax, VA 22030
Telephone: (703) 385-5200
Facsimile: (703) 385-5080